

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 July 2005 (21.07.2005)

PCT

(10) International Publication Number
WO 2005/067031 A1

(51) International Patent Classification⁷: **H01L 21/762**,
41/22, G02B 6/12, G02F 1/39, G11C 11/22

(21) International Application Number:
PCT/CH2004/000365

(22) International Filing Date: 17 June 2004 (17.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
04000408.7 12 January 2004 (12.01.2004) EP

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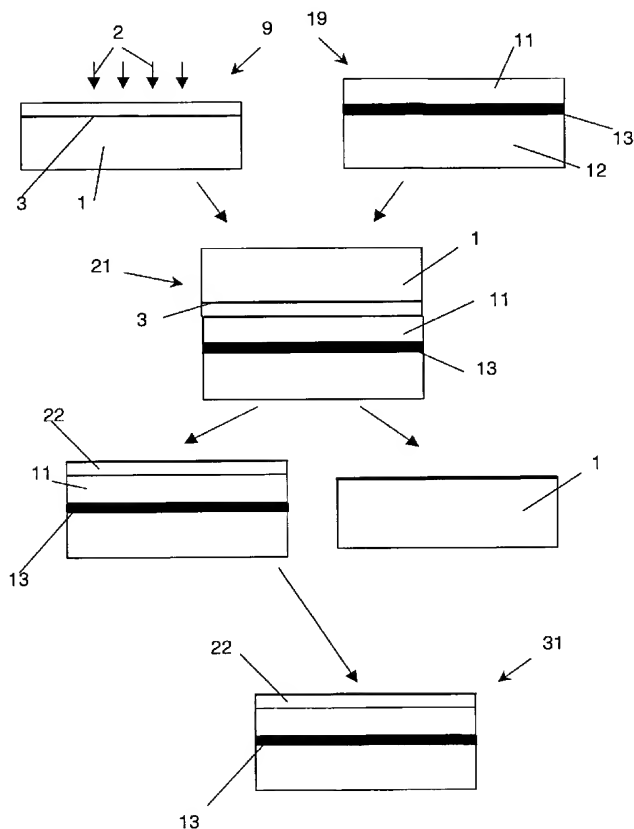
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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: FERROELECTRIC THIN FILMS AND DEVICES COMPRISING THIN FERROELECTRIC FILMS



(57) Abstract: A method of producing a device with a ferroelectric crystal thin film on a first substrate (12) comprises the steps of providing a ferroelectric crystal (1), of irradiating a first surface of said ferroelectric crystal with ions (2) so that a damaged layer (3) is created underneath said first surface, of bonding a block (19) of material including said first substrate (12) to said ferroelectric crystal to create a bonded element (21), wherein an interface is formed between said first surface and a second surface of said block, and of heating the bonded element and separating it at the damaged layer, so that a ferroelectric crystal layer (22) remains supported by the first substrate. By this method, very thin films - down to thicknesses a fraction of a micrometer - of ferroelectric crystals may be fabricated without jeopardizing the monocrystalline structure. According to a preferred embodiment, prior to bonding the block to the second substrate, the first substrate is provided with a electrode layer (13) prior to the bonding. In this way, a thin ferroelectric crystal layer may even be subjected to an applied voltage by electrodes.

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European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

— *with international search report*